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ESTIMATING VALUE OF PT. SENTUL CITY TBK, REAL ESTATE SECTOR COMPANY – USING FOUR METHODS VALUATION; COMPANY VALUATION OF A REAL ESTATE COMPANY

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Abstract

Real Estate sector in Asia, including Indonesia, are experiencing significant progress. This is happens because of the global economic crisis in Europe and America, thus making the investors start to touch the real estate sector, especially Asia. But how big is the value of the real estate sector in Indonesia that makes the investors interested in this sector? From there the author tries to analyze a company engaged in real estate and property sector. PT Sentul City Tbk is a company engaged in the sector and has the most extensive inventory of land in Indonesia compared to other companies in the same sector. In this study, the authors will use four methods to assess the company. The method is Asset-Based Approach, Market Approach, Discounted Cash Flow, and Capitalization Rate. The author also wanted to see whether to assess a company engaged in real estate and property sector will be effective by using the methods already mentioned, especially the Discounted Cash Flow method. The conclusion of this study is that assessing a company engaged in real estate and property sector by using the Discounted Cash Flow method is less effective, especially for companies that have too many land owned. This research is made to estimate the value of PT. Sentul City Tbk. and as the addition, this research also focuses to finding the recommendations that can be implemented to maximize the company value.

The methods that used in this research were Asset Based Approach, Market Approach using P/E Ratio, Discounted Cash Flow using the Weighted Average Cost of Capital as the discount rate, and Capitalization Rate as the adjustment of Net Operating Income to find the value. This research will use the

audited financial statements from 2007-2011. The result in this research shows that the company value at the beginning of year 2012 ranged from Rp3,766,066,940,143 - Rp17,153,451,874,388. And the current share price now which is Rp205 per August 10th 2012 is between Rp109-Rp535, which means this company still be a good choice for investors. This research focuses on estimating the value and stock price of the PT. Sentul City Tbk. Originality/value: This paper valuing a public listed company using four method in valuing a firm, and also to know that using discounted cash flow to valuing company in company which have high inventory effective or not.

Keywords:Valuation; Real Estate Sector; Asset-Based Approach; Market Approach; Discounted Cash Flow; Capitalization Rate

Category: Finance

Introduction

Every firm has the same objective in corporate finance, that's to maximize the value. For a new business or company will find the best alternative to increase the capital, so they can go public or IPO (Initial Public Offering). IPO is the first sale of stock by company to public investor and the company can gather up an amount of capital with this way. IPO helps the company to create a public awareness about the company as these public offerings generate publicity by inducing their products to various investors.

The founders of the companies have an affinity towards IPO as it can increase the wealth of the company, without dividing the authority as in case of partnership. Going public will result in increased capital for the issuer. A public offering places a value on your company's stock and insiders who retain stock may be able to sell their shares or use them as collateral. Going public also creates a type of currency in the form of its stock that the business can use to make acquisitions. In addition, the company will likely have access to capital markets for future financing needs. Generally, a company's debt-to-equity ratio improves after an initial public offering, which means that the company may be able to obtain more favorable loan terms from lenders.

The condition of a company can be seen from financial reports. Through financial report, investors can assess values, characteristic and performance of the company. This will be reckoning for investors is right if invest in the company. Indeed, if only through look at the company financial statement it could not say exactly 100% because investors should read market industry or sector that will be a place to invest. But, in assessing the company through financial report, investors can make lots of options before made it easier to invest.

In finance, valuation is the process of estimating what something is worth. Items that are usually valued are a financial asset or liability. According to Damodaran on

Valuation : Security Analysis for Investment and Corporate Finance (2006) , "Some assets are easier to value than others, the details of valuation vary from asset to asset, and the uncertainty associated with value estimates is different for different assets, but the core principles remain the same."

Valuations are needed for many reasons such as investment analysis, capital budgeting, merger and acquisition transactions, financial reporting, taxable events to determine the proper tax liability, and in litigation.

PT Sentul City Tbk is an Indonesia-based property development and management company. The Company is engaged in township

development called Sentul City which encompasses the activities related to building infrastructures, offering ready-to-develop land, construction of residential clusters, construction of commercial and non-commercial buildings and provision of support and property management services. This Company also have a concept of ECO city which only 40% of the land owned will be develop and the 60% for planting.

Literature Study

Valuations plays a key role in many areas of finance (in portfolio management, mergers and acquisitions and corporate finance). In portfolio management, it used to determine in large part by the investment philosophy of the investor. Valuation in merger and acquisitions can used to make an analysis before the firm take a decision to acquire the target firm or used by target firm to decide accept or reject the offer. And the valuation in corporate finance can be used to maximize value of the company. A company that can maximize value or has high value is a company who has a good financial condition. Business valuation is a process and a set of procedures used to determine what a business is worth.

According to the James R Hitchner in *Financial Valuation* (2003), there are 3 major approaches to business valuation: the Income Approach, the Market Approach, and the Cost Approach. But the author will put another method, which is Capitalization Rate. This research mainly focus that discounted cash flow method is effective to valuing real estate company or not.

Methodology

In this research the author will discuss the step by step to calculate the corporate value of PT. Sentul City Tbk. using Asset-Based Approach, Market Approach, Discounted Cash Flow, and Capitalization Rate. Asset-Based Approach is method that determining value of net asset. Market Approach reflects the current market condition to determine how much worth of a business using P/E ratio. Discounted Cash Flow is a method for determining the current value

from Free Cash Flow by using the forecast of financial statements which adjusted to present value by Weighed Cost of Capital as the discount rate. Capitalization rate is close variation on the infinite growth model used by many real estate appraisers to value properties. It will use for adjusted rate of net operating income to find the value of firm. But because this research

mainly focus that discounted cash flow method is effective to valuing real estate company or not, so the author will explain more about discounted cash flow. This research using the historical data from the audited financial report of PT. Sentul City Tbk. from year 2007-2011 and then trying

to make forecast financial statements for the next five years.

Data Analysis

A. Asset-Based Approach

Valuing company of PT. Sentul City Tbk using Asset-Based Approach can be seen from the latest financial report of the company. This is because the company has been noted the financial asset, liabilities and equity at the fair value. but for the developed land and land for development, it have a different way to adjust.

Table 1. Adjusted Land of PT. Sentul City Tbk

Net Asset Value	Area	Land Sell Price per m ² (1ha=10000m)	Total Value	Share Owned	Total Value owned by Company
	Ha	Rp	Rp	%	Rp
Developed Land at the end of 2011	266,8412				
Land For Development at the end of 2011	779,84				
Total Land	1046,6812				
Total Land for develop 40% (ECO-City)	418,67248				
Residential Area (82%)	343,3114336	2.500.000	8.582.785.840.000	100%	8.582.785.840.000
Commercial Area (18%)	75,3610464	5.000.000	3.768.052.320.000	100%	3.768.052.320.000
Total Estimate Asset Value					12.350.838.160.000

Table 2. Net Asset PT. Sentul City Tbk

ASSETS	
Cash and cash equivalents	88,819,872,426
Short-Term Investment	732,581,968
Account Receivable	278,111,594,382
Inventories	47,665,460,738
Other Current Assets	1,081,090,341,000
Other Long-Term Assets	1,559,624,033,408
Net Fixed Assets	45,363,159,972
Land value	12,350,838,160,000
TOTAL ASSETS	15,493,399,615,582

From the Balance sheet 2011, the total asset of PT. Sentul City Tbk is Rp15,493,399,615,582. So the corporate value of PT. Sentul City Tbk using Asset-Based Approach is Rp15,493,399,615,582.

B. Market Approach

In calculating the company value using Market

Approach the author will compare the P/E Ratio Sector Real Estate and the P/E Ratio Company that taken per July 13th 2012, which are P/E Ratio real estate sector is 27.78 and the P/E Ratio company is 39.41. To get the corporate value using Market Approach, the P/E Ratio needs to be multiplied with the net income of the company. The net income in the year 2011 is Rp135,567,564,440.

Table 3. P/E Ratio Value

Value by P/E Ratio Sector	
=P/E Ratio Sector x Net Income	
= 27.78 x Rp 135,567,564,440	
= Rp3,766,066,940,143	
Value by P/E Ratio Company	
=P/E Ratio Company x Net Income	
= 39.41 x Rp 135,567,564,440	
= Rp5,342,717,714,580	

So, the value using P/E ratio sector is smaller amount from P/E Ratio Company. This means, the company are experiencing very high growth and this make many investor want to invest their money to this company.

C. Discounted Cash Flow

In calculating the corporate value using Discounted Cash Flow Approach, the author will use the Weighted Average Cost of Capital as the discount rate, the discount rate is 18.53%. And

to finding the expected growth rate, the author will use the Compound Annual Growth Rate from the past 5 years and historical growth rate to assumes the expected growth rate in pro forma financial statements, so the assume of the expected growth is 26.51%, it is for most likely scenario growth and for optimistic and pesimistic scenario the expected growth is increasing/decreasing 7% from most likely scenario. This growth is taken from GDP growth sector.

Table 4. Growth GDP per sector 2Q/2012

Sector	Growth
Agriculture	+4.3%
Mining	+3.1%
Processing Industry	+5.4%
Electricity, gas & watersupply	+5.9%
Construction	+7.4%
Trade, Hotel & Restaurant	+8.9%
Transport and Communication	+10.1%
Finance, Real Estate, Corporate Service	+7.0%
Services	+5.7%

1) Most Likely Scenario

Table 5. DCF Most Likely Scenario

	2012F	2013F	2014F	2015F	2016F
EBIT	135.935.253.714	171.968.048.208	217.552.171.320	275.219.424.418	348.172.721.594
Tax	33.983.813.428	42.992.012.052	54.388.042.830	68.804.856.105	87.043.180.399
<i>EBIT(1-tax)</i>	101.951.440.285	128.976.036.156	163.164.128.490	206.414.568.314	261.129.541.196
Depreciation and amortization	10.606.858.096	13.418.452.054	16.975.324.257	21.475.028.003	27.167.482.680
Less :					
Capital Expenditure	12.024.558.576	15.211.946.956	19.244.226.615	24.345.355.600	30.798.657.237
Change in Net Working Capital	567.330.965.834	717.715.207.916	907.962.284.267	1.148.638.764.455	1.453.112.132.597
<i>Free Cash Flow to Firm</i>	(466.797.226.029)	(590.532.666.662)	(747.067.058.135)	(945.094.523.738)	(1.195.613.765.958)

Terminal Value					(10.783.931.945.778)
Discount Factor (WACC)	18,53%				
Perpetuity Growth	6,70%				
PV of Free Cash Flow to Firm	(393.822.601.388)	(420.328.334.195)	(448.618.001.872)	(478.811.669.905)	(511.037.484.630)
PV Terminal value					(4.609.342.592.824)
TOTAL PV of Free Cash Flow (beginning of 2012)	(Rp6.861.960.684.815)				

2) Pesimistic Scenario

DCF Pesimistic
Table 6. Scenario

	2012F	2013F	2014F	2015F	2016F
EBIT	128.413.580.137	153.463.629.838	183.400.273.226	219.176.753.832	261.932.267.469
Tax	32.103.395.034	38.365.907.460	45.850.068.306	54.794.188.458	65.483.066.867
<i>EBIT(1-tax)</i>	96.310.185.103	115.097.722.379	137.550.204.919	164.382.565.374	196.449.200.602
Depreciation	10.019.951.300	11.974.575.396	14.310.494.296	17.102.088.401	20.438.247.739
Less :					
Capital Expenditure	8.849.137.378	10.575.367.041	12.638.337.871	15.103.739.049	18.050.073.958
Change in Net Working Capital	417.511.347.610	498.956.627.751	596.289.700.392	712.609.848.268	851.620.941.153
<i>Free Cash Flow to Equity</i>	(320.030.348.586)	(382.459.697.018)	(457.067.339.048)	(546.228.933.542)	(652.783.566.770)
Terminal Value					(5.887.832.475.510)
Discount Factor (WACC)	18,53%				
Perpetuity Growth	6,70%				
PV of Free Cash Flow to Firm	(269.999.857.273)	(272.226.510.775)	(274.471.527.197)	(276.735.057.976)	(279.017.255.797)
PV Terminal value					(2.516.617.978.047)
TOTAL PV of Free Cash Flow (beginning of 2012)	(3.889.068.187.064)				

3) Optimistic Scenario

Table 7. DCF Optimistic Scenario

	2012F	2013F	2014F	2015F	2016F
EBIT	143.456.927.290	191.525.500.878	255.700.565.874	341.378.976.108	455.765.926.563
Tax	35.864.231.822	47.881.375.219	63.925.141.468	85.344.744.027	113.941.481.641
<i>EBIT(1-tax)</i>	107.592.695.467	143.644.125.658	191.775.424.405	256.034.232.081	341.824.444.922
Depreciation and amortization	10.019.951.300	13.377.368.578	17.859.766.452	23.844.095.785	31.833.613.577
Less :					
Capital Expenditure	15.199.979.774	20.293.085.839	27.092.755.317	36.170.811.896	48.290.682.064
Change in Net Working Capital	717.150.584.058	957.448.534.632	1.278.263.891.640	1.706.575.881.175	2.278.403.745.313
<i>Free Cash Flow to Equity</i>	(614.737.917.065)	(820.720.126.234)	(1.095.721.456.099)	(1.462.868.365.206)	(1.953.036.368.877)
Terminal Value					(17.615.564.398.196)
Discount Factor (WACC)	18,53%				
Perpetuity Growth	6,70%				
PV of Free Cash Flow to Firm	(Rp518.635.656.278)	(Rp584.170.771.534)	(Rp657.986.943.596)	(Rp741.130.571.812)	(Rp834.780.279.184)
PV Terminal value					(Rp7.529.366.068.471)
TOTAL PV of Free Cash Flow (beginning of 2012)	(Rp10.866.070.290.876)				

Based on Discounted Cash Flow method above, the value of company is very poor, this is because of the change in working capital of PT. Sentul City Tbk is positive and too high. The high of change in working capital due to the current asset value is very large compared to the value of current liabilities. In other words, calculating value to the company which have high net working capital using discounted cash flow is less effective.

D. Capitalization Rate

1) Most Likely Scenario

Table 8. Capitalization Rate Most Likely Scenario

MOST LIKELY						
(Expected growth 26,51%)		2012F	2013F	2014F	2015F	2016F
Operating Income		135.935.253.	171.968.048	217.552.171	275.219.424	348.172.721.

		714	.208	.320	.418	594
Ta x		33.983.813.4 28	42.992.012. 052	54.388.042. 830	68.804.856. 105	87.043.180.3 99
Operating Income After Tax		101.951.440. 285	128.976.036 .156	163.164.128 .490	206.414.568 .314	261.129.541. 196
Terminal Value						2.355.278.33 6.085
Discount Factor (WACC)	18,53 %					
Perpetuity Growth	6,70%					
PV NET OPERATING INCOME AFTER TA X		86.013.324.8 22	91.802.343. 018	97.980.983. 773	104.575.470 .140	111.613.790. 084
PV Terminal Value						1.006.709.31 5.958
TOTAL NPV Operating income after tax (beginning of 2012)		1.498.695.22 7.796				

2) *Pesimistic Scenario*

Table 9. Capitalization Rate
Pesimistic Scenario

PESIMISTIC						
CAPITALIZATION RATE		2012F	2013F	2014F	2015F	2016F
Operating Income		128.413.580. 137	153.463.62 9.838	183.400.273. 226	219.176.75 3.832	261.932.267.4 69
Tax		32.103.395.0 34	38.365.907. 460	45.850.068.3 06	54.794.188. 458	65.483.066.86 7
Operating Income After Tax		96.310.185.1 03	115.097.72 2.379	137.550.204. 919	164.382.56 5.374	196.449.200.6 02
Terminal Value						1.771.888.941 .403
Discount Factor (WACC)	18,53 %					
Perpetuity Growth	6,70%					
PV NET OPERATING INCOME AFTER TAX		81.253.969.6 52	81.924.060. 510	82.599.677.5 20	83.280.866. 255	83.967.672.66 4
PV Teminal Value						757.352.995.9 60
TOTAL NPV Operating income after tax (beginning of 2012)		1.170.379.24 2.563				

3) *Optimistic Scenario*

Table 10 Capitalization Rate
Optimistic Scenario

OPTIMISTIC

CAPITALIZATION RATE		2012F	2013F	2014F	2015F	2016F
Operating Income		143.456.927. 290	191.525.500 .878	255.700.565 .874	341.378.97 6.108	455.765.926. 563
Tax		35.864.231.8 22	47.881.375. 219	63.925.141. 468	85.344.744. 027	113.941.481. 641
Operating Income After Tax		107.592.695. 467	143.644.125 .658	191.775.424 .405	256.034.23 2.081	341.824.444. 922
Terminal Value						3.083.112.33 6.444
Discount Factor (WACC)	18,53 %					
Perpetuity Growth	6,70 %					
PV NET OPERATING INCOME AFTER TA X		90.772.679.9 92	102.242.770 .745	115.162.229 .104	129.714.19 8.036	146.104.962. 566
PV Teminal Value						1.317.805.14 5.868
TOTAL NPV Operating income after tax (beginning of 2012)		1.901.801.98 6.310				

Key assumptions
Table 11. capitalization rate

	Value	Information
PV Net Operating Income after tax	1.498.695.22 7.796	MOST LIKELY
	1.170.379.24 2.563	PESIMISTIC
	1.901.801.98 6.310	OPTIMISTI C
WACC	18,53%	Discount rate
perpetuity growth	6,70%	Infinity growth rate
Cap Rate	11,09%	Adjusted rate
Total long-term debt	351.470.275. 415	-
# outstanding shares	31.396.905.0 10	-

Table
12. Value and share price

	Val ue	Informatio n
Property Value	13.517.598.913. 779	MOST LIKELY
	10.556.327.186. 844	PESIMISTI C
	17.153.451.874. 388	OPTIMISTI C

Share Price	419	MOST LIKELY
	325	PESIMISTI C
	535	OPTIMISTI C

Based on Capitalization Rate method above the value of firm ranged from Rp10,556,327,186,844–Rp17,153,451,874,388. This value from three scenario, most likely, pesimistic, and optimistic.

Conclusion and Recommendation

PT. Sentul City Tbk have been a big decreased revenue from 2007-2008, but from 2008-2011 this company have been increased revenue growth over 40%. The growth represent the performance of PT. Sentul City Tbk that this company now in an excellent condition.

The author used three methods in estimating the value of PT. Sentul City Tbk, which are Asset Based Approach, Market Approach, and Discounted Cash Flow Approach. But from the

analyze above, the Discounted Cash Flow Approach is not effective to estimating value company in real estate sector, especially the company which have too many land banks like PT. Sentul City Tbk. So, the author also uses Capitalization Rate Method to substitute the discounted cash flow method to find the value. The estimate value of PT. Sentul city Tbk is ranged from Rp3,766,066,940,143 - Rp17,153,451,874,388. The table below shows the calculation of estimating value and the share price.

Table 13. Estimated Value and Share Price

No.	Methods	Estimate Value	Estimate Share Price	Information	Other Info
1	Asset Based Approach	Rp 15,493,399,615,582	Rp. 482	-	-
2	Market Approach	Rp 3,766,066,940,143	Rp.109	P/E ratio Sector	-
		Rp 5,342,717,714,580	Rp.155	P/E ratio Company	-
3	Discounted Cash Flow Approach	(Rp 6,861,960,684,815)	-	Most Likely	Less Effective
		(Rp 3,889,068,187,064)	-	Pessimistic	
		(Rp 10,866,070,290,876)	-	Optimistic	
4	Capitalization Rate	Rp 13,517,598,913,779	Rp. 419	Most Likely	-
		Rp 10,556,327,186,844	Rp. 325	Pessimistic	-
		Rp 17,153,451,874,388	Rp. 535	Optimistic	-

The Table above shows that the fair value of share price PT. Sentul City Tbk at this time is in the range from Rp 109 – Rp 535, which is Rp 205 (August 10th, 2012). So from the valuation PT. Sentul City Tbk still be a good choice to investor for invest.

The best method in this research to valuing PT. Sentul city Tbk, Real Estate Sector Company is

by using the Asset Based Approach and Capitalization Rate. For Market Approach, it is less effective because of it just using P/E ratio at the time of data taken, it not include the earning growth from the beginning since IPO.

The capitalization rate is effective because it use the operation income which consist of property's sell, oerating expense, rental sell, etc. and the

since real estate is a different business with other and also have a different assets, the best value to valuing the company is also by adjusted some assets to seems to the fair value. In valuing real estate company, this is very important to adjust the land value with the current sell price because real estate sector did not want to reevaluate the value of the land banks. In other words, if real estate sector company buy the land assets with the price is Rp500,000 per m² and the current sell price is Rp3,000,000 per m², company will write the buying price on valuing the land asset at inventory account on the financial statements, because if company write with the current sell price, the delta between buying and selling price will subject to tax whereas it still note as inventory account.

Since this company's stock volume in one year have an irregularity graph, it is difficult to predict the projections of PT. Sentul City Tbk. but based on the calculation on this research, the author recommend to buy this stock since the current share price is still underprice.

Recommendation

PT. Sentul City Tbk already has an excellent performance, it shown from their revenue growth from year to year. There are several strategies that recommended by the author to helping the company to maintain its performance and enhance its value:

1. Since this company has too many land banks as their inventory, the company should maximize the land. The company can make more projects or sell the land. This will impact to increase on revenue of the company and for discounted cash

flow model it will impact to the lower change net working capital.

2. Net Profit Margin of real estate sector will increase because of the land price always increases, moreover at this time the price of luxury residential area in Jakarta has been increased. Since Sentul City located in the south of Jakarta, it can be an alternative option to customer for the luxury residential area, the company should increase the marketing strategy to attract more attention from customer and investor, also will impact to increase on the revenue.

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